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#### REMARKS

Applicants have amended Claim 1. Support for the amendment may be found in the originally filed Claims and on page 13, lines 1-9 of the Specification. Applicants submit that no new matter is presented by these amendments and respectfully request entry of the same.

By these amendments, Applicants do not acquiesce to the propriety of any of the Examiner's rejections and do not disclaim any subject matter to which they are entitled.

## Claim Rejections Under 35 U.S.C. §102 (b) Should be Withdrawn

The Examiner has rejected claims 1-3, 5 and 6 under 35 U.S.C. §102(b) as allegedly being anticipated by Cronin et al. (WO 98/30883). Applicants respectfully disagree with the Office Action.

Cronin et al. disclose a probe array comprising two sets of probes for analyzing polymorphisms in genes such as biotransformation genes. Claim 1 of the present invention teaches interrogation of a *joining sequence* between nucleic acid sequence elements employing at least two sets of probes that interrogate different regions (e.g. 3' and 5' regions) of the sequence elements. However, solely to expedite the issuance of the present Claims, Applicants have amended Claim 1 to recite the characteristics of the probes that comprise the array. Support for the amendment may be found in the originally filed Claims and throughout the Specification, particularly, on page 13, lines 1-9 of the Specification. Therefore, this rejection of Claim 1 should be withdrawn.

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Regarding Claims 2, 3 and 5-6, Applicants submit that in view of the above remarks and the amendment to Claim 1, the rejection of Claims 2, 3 and 5-6 should also be withdrawn.

In summary, Applicants respectfully submit that the Examiner has failed to point out how Cronin et al. disclose each and every element of the currently claimed invention and request that the rejection of Claims 1-2, 3 and 5-6 under 35 U.S.C. §102(b) should be withdrawn.

### Claim Rejections Under 35 U.S.C. §102 (e) Should be Withdrawn

The Examiner has rejected Claims 1-2 under 35 U.S.C. §102(e) as allegedly being anticipated by Hacia et al. (U.S. Patent No. 6,342,355). Applicants respectfully disagree with the Office Action.

Hacia et al. disclose methods for analyzing allelic variations using probe arrays wherein the probe sets could overlap the site of potential variation (Column 8, lines 3-21). Amended Claim 1 and Claim 2 of the present invention teach interrogation of a joining sequence between nucleic acid sequence elements employing at least two sets of probes that interrogate different regions (e.g. 3' and 5' regions) of the sequence elements. Thus, the Examiner has failed to point out how Hacia et al. disclose each and every element of the claimed invention.

Applicants respectfully submit that in view of the above remarks, the rejection of Claims 1-2 under 35 U.S.C. §102(e) should be withdrawn.

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# Claim Rejections Under 35 U.S.C. § 103 Should be Withdrawn

The Examiner has rejected Claims 4-10 under 35 U.S.C. §103(a) as allegedly being unpatentable over Cronin et al. in view of Hacia et al. and further in view of Lockhart et al. (U.S. Patent No. 6,040,138). Applicants respectfully disagree with the Office Action.

As discussed in the previous sections, Cronin et al. and Hacia et al. disclose the detection of sequence variations using microarrays. Lockhart et al. teach high-density probe array technology. The amended Claims of the present invention however, are directed to probe arrays that interrogate a *joining sequence* between nucleic acid sequence elements, employing at least two sets of probes that interrogate different regions (e.g. 3' and 5' regions) of the sequence elements. Applicants submit that the Examiner has not shown that the cited references, alone or in combination, provide suggestions or motivations for the currently claimed invention.

In summary, Applicants respectfully submit that in view of the foregoing amendments and remarks, the rejection of Claims 4-10 under 35 U.S.C. §103(a) should be withdrawn.

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#### CONCLUSION

For these reasons, Applicants believe all pending claims are now in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 731-5000.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account 01-0431.

If the Examiner has any questions pertaining to this application, the Examiner is requested to contact the undersigned agent.

Respectfully submitted,

Priyadarshini Rath

Limited Recognition under 37 CFR 10.9(b)

Dated: February 27, 2004

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